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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,956	03/15/2004	Brian Keegan	KEEB 101	9962

7590 09/25/2006

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EXAMINER

FERNSTROM, KURT

ART UNIT PAPER NUMBER

3711

DATE MAILED: 09/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/800,956

Applicant(s)

KEEGAN, BRIAN

Examiner

Kurt Fernstrom

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 4 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/1/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

Claim 3 objected to because of the following informalities: The recited Markush group lists "styrene" twice. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Because the elastomers are not clearly recited, it is not clear what the 60:30 ration is intended to refer to.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 5-14 and 16-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hibi in view of Yamada, and further in view of Robbins. Hibi discloses in Figure 1 and in the specification a phantom for use with ultrasonic imaging

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procedure training comprising a phantom body forming a simulated human anatomical structure, where a simulated blood vessel 17 is formed within the device. While Hibi does not disclose the method of heating and cooling a mold as recited, these steps are well known, as disclosed for example in column 2, line 51 to column 3, line 40 of Robbins. It would have been obvious to one of ordinary skill in the relevant art to modify the device and method of Hibi by providing for heating a composition and pouring it into a mold for the purpose of providing a shape which more closely resembles a portion of the anatomy. Hibi also fails to disclose a scattering agent as recited. However, this feature is known in the art, as disclosed for example in column 3, lines 11-27 of Robbins. It would have been obvious to one of ordinary skill in the relevant art to modify the device and method of Hibi by providing for heating a composition and pouring it into a mold for the purpose of providing a shape which more closely resembles a portion of the anatomy. With respect to claims 5-8, the recited scattering agents perform the same function as that disclosed by Robbins, and is considered to be an obvious variation thereon. With respect to claims 11-13, Hibi discloses that the phantom device comprises cavities into which simulated anatomical substances are inserted. With respect to claim 14, Hibi discloses that fluid is provided in the simulated blood vessel. With respect to claims 16-23, the recited method steps are disclosed or suggested by Hibi as viewed in combination with Robbins.

Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hibi in view of Robbins, and further in view of Biermann. Hibi as viewed in combination with Robbins discloses all of the limitations of the claims with the exception of the

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specific elastomers used. It is known to use styrene and ethylene in simulations of the human anatomy, as disclosed for example in column 2, line 50 to column 3, line 11. It would have been obvious to one of ordinary skill in the relevant art to modify the device and method of Hibi by providing styrene and ethylene for the purpose of providing a material which simulates a portion of the anatomy. With respect to claim 4, the recited ratio would have been an obvious variation, as it is not clear which elastomers are being provided in what ratio.

Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hibi in view of Robbins, and further in view of Thielbar. Hibi as viewed in combination with Robbins discloses all of the limitations of the claims with the exception of the pigment. It is known to use pigment in simulations of the human anatomy, as disclosed for example in column 13, lines 33-48. It would have been obvious to one of ordinary skill in the relevant art to modify the device and method of Hibi by providing pigment for the purpose of providing a material which more closely simulates a portion of the anatomy.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hibi in view of Robbins, and further in view of Wise. Hibi as viewed in combination with Robbins discloses all of the limitations of the claims with the exception of the plug. Wise discloses in Figure 1 and in column 2, lines 25-35 a device for simulating the human anatomy, comprising a simulated blood vessel which extends to the surface and further comprising a plug 26 which is inserted into the vessel. It would have been obvious to one of ordinary skill in the relevant art to modify the device and method of

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Hibi by providing a plug as recited for the purpose of preventing leakage of fluid within the device.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yamada, Levy, Toly, Saloner, Sandrik and Carr disclose various ultrasonic phantoms.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kurt Fernstrom whose telephone number is (571) 272-4422. The examiner can normally be reached on M, T, Th 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Kim can be reached on 571 272-4463. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KF
September 18, 2006



**KURT FERNSTROM
PRIMARY EXAMINER**